

**ABSTRACT**

A two-legged walking robot includes a pair of foot members a calf member provided above each foot member, a double-axis ankle joint provided between the foot member and the calf member to allow the foot member to rotate relative to the calf member in forward and backward directions and in right and left directions. The robot also includes a femoral member provided above each calf member, a single-axis knee joint provided between the calf member and the femoral member, a hip member provided above the femoral member, and a double-axis hip joint provided between the femoral member and the hip member to allow the femoral member to rotate relative to the hip member in the forward, backward, right, and left directions. Thus, the present invention provides a two-legged walking robot to operate similar to a human ankle, knee and hip.